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| APPLICATION NO.            | FI                              | LING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.      |  |
|----------------------------|---------------------------------|------------|----------------------|---------------------|-----------------------|--|
| 09/781,323                 | 02/13/2001                      |            | Nobuhiro Kodama      | 725.1142/DMP        | 725.1142/DMP 9072     |  |
| 21171                      | 7590                            | 12/23/2004 | ,                    | EXAM                | EXAMINER              |  |
| STAAS &                    | STAAS & HALSEY LLP<br>SUITE 700 |            |                      |                     | FREJD, RUSSELL WARREN |  |
| 1201 NEW YORK AVENUE, N.W. |                                 |            |                      | ART UNIT            | PAPER NUMBER          |  |
| WASHING                    | ron, dc                         | 20005      | 2128                 | •                   |                       |  |

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application N .   | Applicant(s)   |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Office Action Summary   | 09/781,323  | KODAMA ET AL.  |  |  |  |  |  |
| Onice Action Summary  | Examiner  | Art Unit   |  |  |  |  |  |
|   | Russell Frejd   | 2128   |  |  |  |  |  |
| The MAILING DATE of this communication appears n the cover sheet with the correspondence address Period for Reply   |   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tim<br>y within the statutory minimum of thirty (30) days<br>vill apply and will expire SIX (6) MONTHS from<br>, cause the application to become ABANDONEI                                | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). |  |  |  |  |  |
| Status  |   |  |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 13 Fe   | ebruary 2001.   |  |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☑ This  | action is non-final.  |  |  |  |  |  |  |
| • •   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                     |  |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |  |
| <ul> <li>5)⊠ Claim(s) 1-22,28-37,39 and 40 is/are allowed.</li> <li>6)⊠ Claim(s) 23,25 and 38 is/are rejected.</li> <li>7)⊠ Claim(s) 24,26 and 27 is/are objected to.</li> </ul>  | 4)  Claim(s) <u>1-40</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5)  Claim(s) <u>1-22,28-37,39 and 40</u> is/are allowed. 6)  Claim(s) <u>23,25 and 38</u> is/are rejected. |  |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | r.  |  |  |  |  |  |  |
| D)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex   |   | • •  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some color None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |   |  |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  | 4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa   |  |  |  |  |  |  |
| Paper No(s)/Mail Date <u>2.13.01, 2.5.03</u> .  | 6)  Other:  | ·  |  |  |  |  |  |

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#### Examination of Application #09/781,323

1. Claims 1-40 of application 09/781,323, filed on 13-February-2001, are presented for examination.

### Claim Objections under 37 CFR 1.75(d)(1)

2. Claims 1, 7-9, 13, 16, 17, 23-25, and 31 are objected to under 37 CFR 1.75(d)(1), wherein --

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a))

Each of the claims listed above contains language such as, for example, "informing" or "informs information". The examiner carefully considered the specification for clarification of these of these terms, but was unable to find similar language. The examiner respectfully objects to these terms because there is no apparent correlation to the language of the specification, and asks applicant to either adopt the specification language or provide a statement as to the meaning of the claim language.

## Claim Rejections under 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time

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the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering the objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 23, 25 and 38 are rejected under 35 U.S.C. 103 as being unpatentable over the article authored by <u>Alibozek</u>, entitled *Smart Software Builds a Better Harness*, Machine Design, May 1998.
- 5. Alibozek disclosed the invention substantially as claimed, including an electromechanical software package that automatically handles merging and continuously changing electrical and mechanical feature information in designing wire harnesses [p. 89, col. 1] comprising:

In regard to claim 23, an algorithm-based software program which checks wire formation, to verify that the virtual prototype is a valid physical representation of the harness, including the bend radius on each wire, thereby ensuring that the wire is not out of limits [p. 92, col. 1](applicant's calculating a wiring shape and forces acting at a plurality of positions).

Alibozek does not specifically calculate the forces acting at a plurality of fixing positions. However, Alibozek does disclose algorithms for considering wire material type, shielding, and wrap information for all wires in a bundle to calculate limits and compare them to the actual bundle geometry [p. 92, col. 1]. One of ordinary skill in the art would have found it obvious to

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modify Alibozek to include the plurality of fixing positions of the present invention because it would ensure that the harness design is not out of limits, thereby eliminating overstressed conductors before the design data is sent to manufacturing [p. 92, col. 1].

In regard to claim 25, an algorithm-based software program which checks wire formation to calculate limits and compare them to the actual bundle geometry, in order to ensure that the harness design is not out of limits, thereby eliminating overstressed conductors before the design data is sent to manufacturing [p. 92, col. 1](applicant's generating a warning if the force exceeds a predetermined value set in advance as a design strength).

In regard to claim 38, a computer program in a CAD software package, for handling the spatial features of a harness design [p. 89, col. 1].

#### Claim Objections

6. Claims 24, 26, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Allowed Claims

7. Claims 1-22, 28-37, 39 and 40 are deemed allowable over the prior art of record at this time.

#### Response Guidelines

8. A shortened statutory period for response to this action is set to expire 3 (thre ) months and 0 (zero) days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

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#### 9. Any response to the Examiner in regard to this non-final action should be

directed to: Russell Frejd, telephone number (571) 272-3779, Monday-Friday

from 0530 to 1400 ET, or the examiner's supervisor, Jean Homere,

telephone number (571) 272-3780.

mailed to: Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306

Hand-delivered responses should be brought to 220 South 20<sup>th</sup> Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington. VA., 22202.

Date: 12-December-2004

RUSSELL FREJD PRIMARY EXAMINER